POSTAL RATE COMMISSION
WASHINGTON, D.C. 20268-0001

POSTAL RATE AND FEE CHANGES, 1997 Docket No. R97-1

NOTICE OF THE UNITED STATES POSTAL SERVICE CONCERNING THE FILING OF ERRATA TO USPS LIBRARY REFERENCE H-130

The United States Postal Service hereby gives notice that it is filing revised pages to Library Reference H-130, the Accept and Upgrade Study which is relied upon by witnesses Hatfield (USPS-T-25) and Daniel (USPS-T-29).

The correct outputs from this Library Reference are reflected in the aforementioned testimonies, but not reflected in the Library Reference, as originally filed. The changes ot USPS-LR-H-130 are as follows:

Page 10 -- Table 5.3 -- ISS Upgrade and Encode rates have changed to reflect the new values.

Appendix C, page 4 -- Line number references from 350 to 482 have been changed to reflect the addition of one new line of code to the SAS program.

Appendix C, pages 33-37 -- These pages of the log file now reflect the additional line of code that was added to the SAS program.

Appendix C, pages 48, 50, 51 -- These pages, which show the SAS output, have changed as a result of the new ISS Upgrade Encode rates.

Corrected pages are attached.

Respectfully submitted,

UNITED STATES POSTAL SERVICE

By its attorneys:

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Table 5.1
OSS Accept, Upgrade, and Encode Rates

	Accept	Upgrade	Encode
FC metered mail (belt or bypass)	0.8568	0.9146	0.7837
FC Presort non-automation, OCR	0.8579	0.8574	0.7356
FC Presort non-automation, Non-OCR	0.7844	0.8757	0.6869
3C 3/5 presort non-automation, OCR	0.8553	0.8965	0.7668
3C 3/5 presort non-automation, Non-OCR	0.7012	0.9119	0.6394
3C basic presort non-automation, OCR	0.8347	0.8564	0.7148
3C basic presort non-automation, Non-OCR	0.7286	0.8765	0.6386
Machine Printed First-Class collection mail	0 8304	0.9270	0.7698
Handwritten First-Class collection mail	0.8735	0.9299	0.8123

Table 5.2
OSS Reject Rates

	ISS	LMLM	OSS	Manual
FC metered mail (belt or bypass)	0.5987	0.0559	0.0138	0.0136
FC Presort non-automation, OCR	0.0363	0.0749	0.0176	0.0133
FC Presort non-automation, Non-OCR	0.0706	0.1136	0.0090	0.0224
3C 3/5 presort non-automation, OCR	0.0507	0.0651	0.0172	0.0118
3C 3/5 presort non-automation, Non-OCR	0 0806	0.1797	0.0133	0.0252
3C basic presort non-automation, OCR	0.0479	0.0786	0.0267	0.0121
3C basic presort non-automation, Non-OCR	0.0728	0.1444	0.0254	0.0288
Machine Printed First-Class collection mail	0 0649	0.0748	0.0119	0.0180
Handwritten First-Class collection mail	0.0395	0.0679	0 0096	0.0095

Table 5.3
ISS Accept, Upgrade, and Encode Rates

	Accept	Upgrade	Encode
FC metered mail (belt or bypass)	0.7488	0.8105	0.6069
FC Presort non-automation, OCR	0.8364	0.7161	0.5990
FC Presort non-automation, Non-OCR	0.6798	0.7645	0.5197
3C 3/5 presort non-automation, OCR	0.7971	0.7735	0.6166
3C 3/5 presort non-automation, Non-OCR	0.6448	0.8087	0.5215
3C basic presort non-automation, OCR	0.7641	0.7340	0.5608
3C basic presort non-automation, Non-OCR	0.6115	0.7582	0.4837
Machine Printed First-Class collection mail	0.7024	0.7995	0.5616
Handwritten First-Class collection mail	0.0836	0.5742	0.0480

67-73	Remove observations with missing values from ISS subset
74-84:	Define and calculate OSS upgrade and reject sums for each observation
85-89:	Calculate total rejects for each observation
90-94:	Calculate reject factor
95-104:	Apply factor to reject sums for each observation
105-116:	Calculate aggregate sums for OSS terms
117-122:	Begin variance analysis of OSS rates by preparing datasets
123-130:	Aggregate OSS pieces and rates by mailtype and stratum
131-138:	Aggregate OSS pieces fed and sorted by mailtype
139-146:	Merge datasets for variance analysis
147-174:	Calculate variances
175-188:	Calculate standard deviations
189-201:	Calculate aggregate OSS rates
202-218:	Print aggregate rates
219-226:	Merge standard deviations with aggregate OSS rates
227-253:	Calculate confidence intervals and coefficients of variation for OSS subset
254-325:	Print OSS rates with coefficients of variation and confidence limits
326-341:	Determine ISS accept and upgrade sums and rates for each observation
342-349:	Aggregate ISS accept, upgrade, and fed sums
351-359:	Calculate aggregate ISS accept, upgrade, and encode rates using aggregate sums
360-370:	Print ISS accept, upgrade, and encode rates
371-376:	Begin variance analysis for ISS rates
377-384:	Aggregate ISS pieces by mailtype and straturn
385-392:	Aggregate ISS pieces fed and accepted by mailtype
393-400:	Merge datasets for variance analysis
401-419:	Calculate ISS variances
420-433:	Calculate ISS standard deviations
434-449:	Calculate ISS coefficients of variation and confidence intervals
450-482:	Print ISS rates with coefficients of variation and confidence intervals

G. *The source program in machine-readable form:*

The source program is included on the attached diskette as 'DATA.SAS.'

```
NOTE: The PROCEDURE PRINT used 0.11 seconds.


315
316  proc print data=conint split='*' noobs;
317   var mailtype REJMAN mancov conmanp conmanm;
318   title 'OSS Reject to Manual Rate with Coefficient of Variation and Confidence
Interval';
319   label REJMAN='Reject to Manual Rate'
320         mancov='CV'
321         conmanp='Upper Bound'
322         conmanm='Lower Bound';
323   format mailtype mailty.;
324  run;

NOTE: The PROCEDURE PRINT used 0.33 seconds.


325
326  ****  BEGIN CALCULATIONS ON ISS SUBSET;
327
328  ****  DETERMINE ISS ACCEPT AND UPGRADE SUMS AND RATES FOR EACH OBSERVATION;
329
330  data iss (drop=O_11DIGI O_9DIGIT O_DBF O_FED O_FRGFGR O_HDRHED O_MISS
331                 O_MSF O_NOI O_NOT O_NOZ O_OUTSRT O_SORTED O_STLOLD O_TMO
332                 O_URT O_VER O_ZNR O_ZPR);
333    set iss;
334    iacc  = I_ACCEPT;
335    iupg = (I_CODEB + I_CODEBP + I_CODEC + I_CODECP + I_UNIQUE);
336    if iupg > iacc then iupg = iacc;
337  run;

NOTE: The data set WORK.ISS has 3137 observations and 20 variables.
NOTE: The DATA statement used 0.71 seconds.


338
339  proc sort data=iss;
340    by mailtype;
341  run;

NOTE: The data set WORK.ISS has 3137 observations and 20 variables.
NOTE: The PROCEDURE SORT used 0.48 seconds.


342
343  ****   AGGREGATE ISS ACCEPT, UPGRADE, AND FED SUMS;
344
345  proc means data=iss noprint;
346    var I_FED iacc iupg;
347    by mailtype;
348    output out=isstot sum=I_FEDTOT iacctot iupgtot;
```

```
349  run;

NOTE: The data set WORK.ISSTOT has 9 observations and 6 variables.
NOTE: The PROCEDURE MEANS used 0.33 seconds.


350
351  ****  CALCULATE AGGREGATE ISS ACCEPT, UPGRADE, AND ENCODE RATES USING AGGREGATE SUMS;
352
353  data issend;
354    set isstot;
355    iacrate =  iacctot / I_FEDTOT;
356    iupgrat =  iupgtot / iacctot;
357    iencrat =  iupgtot / I_FEDTOT;
358  run;

NOTE: The data set WORK.ISSEND has 9 observations and 9 variables.
NOTE: The DATA statement used 0.27 seconds.


359
360  ****  PRINT ISS ACCEPT, UPGRADE, AND ENCODE RATES;
361
362  proc print data=issend split='*' noobs;
363    var mailtype iacrate iupgrat iencrat;
364    title 'ISS Rates';
365    label iacrate='ISS Accept Rate'
366          iupgrat='ISS Upgrade Rate'
367          iencrat='ISS Encode Rate';
368    format mailtype mailty.;
369  run;

NOTE: The PROCEDURE PRINT used 0.11 seconds.


370
371  ****  BEGIN VARIANCE ANALYSIS FOR ISS RATES;
372
373  proc sort data=iss;
374    by mailtype stratum;
375  run;

NOTE: The data set WORK.ISS has 3137 observations and 20 variables.
NOTE: The PROCEDURE SORT used 0.38 seconds.


376
377  ****  AGGREGATE ISS PIECES BY MAILTYPE AND STRATUM;
378
379  proc means data=iss noprint;
380    var I_FED I_ACCEPT iupg;
381    by mailtype stratum;
382    output out=issstrat (drop=_type_ _freq_) sum=;
```

```
383  run;

NOTE: The data set WORK.ISSSTRAT has 36 observations and 5 variables.
NOTE: The PROCEDURE MEANS used 0.28 seconds.


384
385  ****  AGGREGATE ISS PIECES FED AND ACCEPTED BY MAILTYPE;
386
387  proc means data=iss noprint;
388    var I_FED I_ACCEPT;
389    by mailtype;
390    output out=all (drop=_type_ _freq_) sum=allfed allacc;
391  run;

NOTE: The data set WORK.ALL has 9 observations and 3 variables.
NOTE: The PROCEDURE MEANS used 0.33 seconds.


392
393  ****  MERGE DATASETS FOR VARIANCE ANALYSIS;
394
395  data issstrat;
396    set issstrat;
397    merge issstrat all;
398    by mailtype;
399  run;

NOTE: The data set WORK.ISSSTRAT has 36 observations and 7 variables.
NOTE: The DATA statement used 0.33 seconds.


400
401  ****  CALCULATE ISS VARIANCES;
402
403  data issstrat;
404    set issstrat;
405    w2hi = (I_FED / allfed) **2;
406    pacci = I_ACCEPT / I_FED;
407    penci = iupg / I_FED;
408    pupgi = iupg / I_ACCEPT;
409    iaccfac = w2hi * (pacci * (1 - pacci)) / (I_FED - 1);
410    iencfac = w2hi * (penci * (1 - penci)) / (I_FED - 1);
411    iupgfac = w2hi * (pupgi * (1 - pupgi)) / (I_fed - 1);
412  run;

NOTE: The data set WORK.ISSSTRAT has 36 observations and 14 variables.
NOTE: The DATA statement used 0.44 seconds.


413
414  proc means data=issstrat noprint;
415    var iaccfac iencfac iupgfac;
```

```
416    by mailtype;
417    output out=stdrate (drop=_type_ _freq_) sum=;
418  run;

NOTE: The data set WORK.STDRATE has 9 observations and 4 variables.
NOTE: The PROCEDURE MEANS used 0.22 seconds.


419
420  ****  CALCULATE ISS STANDARD DEVIATIONS;
421
422  data stdrate (drop=iaccfac iencfac iupgfac);
423    set stdrate;
424    iaccstd = iaccfac ** .5;
425    iencstd = iencfac ** .5;
426    iupgstd = iupgfac ** .5;
427  run;

NOTE: The data set WORK.STDRATE has 9 observations and 4 variables.
NOTE: The DATA statement used 0.27 seconds.


428
429  data stdrate;
430    set stdrate;
431    merge stdrate issend;
432  run;

NOTE: The data set WORK.STDRATE has 9 observations and 12 variables.
NOTE: The DATA statement used 0.38 seconds.


433
434  ****  CALCULATE ISS COEFFICIENTS OF VARIATION AND CONFIDENCE INTERVALS;
435
436  data iconf;
437    set stdrate;
438    iaccconp = iacrate + (1.96 * iaccstd + 1/(2*I_FEDTOT));
439    iaccconm = iacrate - (1.96 * iaccstd + 1/(2*I_FEDTOT));
440    ienconp = iencrat + (1.96 * iencstd + 1/(2*I_FEDTOT));
441    ienconm = iencrat - (1.96 * iencstd + 1/(2*I_FEDTOT));
442    iupgconp = iupgrat + (1.96 * iupgstd + 1/(2*I_FEDTOT));
443    iupgconm = iupgrat - (1.96 * iupgstd + 1/(2*I_FEDTOT));
444    iaccov = iaccstd / iacrate;
445    iencov = iencstd / iencrat;
446    iupgcov = iupgstd / iupgrat;
447  run;

NOTE: The data set WORK.ICONF has 9 observations and 21 variables.
NOTE: The DATA statement used 0.44 seconds.


448
```

```
449
450  ****  PRINT ISS RATES WITH COEFFICIENTS OF VARIATION AND CONFIDENCE INTERVALS;
451
452  proc print data=iconf split='*' noobs;
453   var mailtype iacrate iaccov iaccconp iaccconm;
454   title 'ISS Accept Rate with Coefficient of Variation and Confidence Interval';
455   label iacrate='Accept Rate'
456         iaccov='CV'
457         iaccconp='Upper Bound'
458         iaccconm='Lower Bound';
459   format mailtype mailty.;
460  run;

NOTE: The PROCEDURE PRINT used 0.11 seconds.


461
462
463  proc print data=iconf split='*' noobs;
464   var mailtype iencrat iencov ienconp ienconm;
465   title 'ISS Encode Rate with Coefficient of Variation and Confidence Interval';
466   label iencrat='Encode Rate'
467         iencov='CV'
468         ienconp='Upper Bound'
469         ienconm='Lower Bound';
470   format mailtype mailty.;
471  run;

NOTE: The PROCEDURE PRINT used 0.11 seconds.


472
473
474  proc print data=iconf split='*' noobs;
475   var mailtype iupgrat iupgcov iupgconp iupgconm;
476   title 'ISS Upgrade Rate with Coefficient of Variation and Confidence Interval';
477   label iupgrat='Upgrade Rate'
478         iupgcov='CV'
479         iupgconp='Upper Bound'
480         iupgconm='Lower Bound';
481   format mailtype mailty.;
482  run;

NOTE: The PROCEDURE PRINT used 0.11 seconds.
```

ISS Rates

MAILTYPE	ISS Accept Rate	ISS Upgrade Rate	ISS Encode Rate
FC metered mail (belt or bypass)	0.74878	0.81047	0.60686
FC Presort non-automation, OCR upgradable	0.83640	0.71610	0.59895
FC Presort non-automation, Non-OCR upgradable	0.67983	0.76451	0.51974
3C 3/5 presort non-automation, OCR upgradable	0.79713	0.77349	0.61657
3C 3/5 presort non-automation, Non-OCR upgradable	0.64483	0.80871	0.52148
3C Basic presort non-automation, OCR upgradable	0.76406	0.73401	0.56083
3CBasic presort non-automation, Non-OCR upgradable	0.61153	0.75820	0.46367
Machine Printed First-Class collection mail	0.70235	0.79953	0.56155
Handwritten First-Class collection mail	0.08361	0.57416	0.04801

ISS Encode Rate with Coefficient of Variation and Confidence Interval

MAILTYPE	Encode Rate	CV	Upper Bound	Lower Bound
FC metered mail (belt or bypass)	0.60686	.0005939	0.60757	0.60615
FC Presort non-automation, OCR upgradable	0.59895	.0006670	0.59973	0.59816
FC Presort non-automation, Non-OCR upgradable	0.51974	.0010773	0.52084	0.51864
3C 3/5 presort non-automation, OCR upgradable	0.61657	.0007537	0.61748	0.61566
3C 3/5 presort non-automation, Non-OCR upgradable	0.52148	.0010565	0.52256	0.52040
3C Basic presort non-automation, OCR upgradable	0.56083	.0010586	0.56200	0.55967
3CBasic presort non-automation, Non-OCR upgradable	0.46367	.0014553	0.46499	0.46234
Machine Printed First-Class collection mail	0.56155	.0005906	0.56220	0.56090
Handwritten First-Class collection mail	0.04801	.0034434	0.04833	0.04768

REVISED
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ISS Upgrade Rate with Coefficient of Variation and Confidence Interval

MAILTYPE	Upgrade Rate	CV	Upper Bound	Lower Bound
FC metered mail (belt or bypass)	0.81047	.00035683	0.81103	0.80990
FC Presort non-automation, OCR upgradable	0.71610	.00051231	0.71682	0.71538
FC Presort non-automation, Non-OCR upgradable	0.76451	.00063002	0.76545	0.76357
3C 3/5 presort non-automation, OCR upgradable	0.77349	.00051723	0.77428	0.77271
3C 3/5 presort non-automation, Non-OCR upgradable	0.80871	.00053760	0.80956	0.80785
3C Basic presort non-automation, OCR upgradable	0.73401	.00072107	0.73505	0.73298
3CBasic presort non-automation, Non-OCR upgradable	0.75820	.00076518	0.75934	0.75706
Machine Printed First-Class collection mail	0.79953	.00033468	0.80006	0.79901
Handwritten First-Class collection mail	0.57416	.00066621	0.57491	0.57341

CERTIFICATE OF SERVICE

I hereby certify that I have this date served the foregoing document upon all participants of record in this proceeding in accordance with section 12 of the Rules of Practice.

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October 6, 1997